Public Health Watch

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What's the Difference? Exploring the Racial Differences between Nashville Youth and Their Involvement in Risk Behaviors (Last in a Series)

Tameka A. Jobe, MA

This is the final installment of a three-part series exploring the information gleaned from the 2003 Youth Risk Behavior Survey (YRBS) conducted in Nashville. The first segment focused on the obesity epidemic sweeping across the country and the implications for Nashville youth. The second segment examined the progress of Nashville youth in meeting the goals established by the Healthy People 2010 Federal Initiative. In this final segment, disparities among youth and their involvement in risky behaviors are explored.

The National Institutes of Health (NIH) defines health disparities as: "differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States."[1] The NIH selected six areas where disparities were apparent that included: infant mortality, cancer screening and management, cardiovascular disease, diabetes, HIV infection/AIDS, and immunizations. While the YRBS does not ask students to report on specific diseases, disparities are evident in many of the behaviors reported by students that may serve as precursors to disease or injury. These disparities are manifest not only among racial categories but also along gender lines. Previous researchers have identified these disparities in television viewing, overweight/obesity, consumption of fruits and vegetables, and smoking among others.[2]

Overall Results

There were several disparate areas identified in the 2003 YRBS conducted in Nashville. Some of these areas included: sexual and reproductive health; intentional and unintentional injury, tobacco use, and physical activity. Table 1 shows the overall results for some of the behaviors that adolescents were asked to report. (See Table 1 on page 2.) The differences between racial categories appear more prominent and are substantive according to the Centers for Disease Control and Prevention (CDC) formula. For example, black youth reported watching substantively more hours of television per day than white youth (82% vs. 59%). In addition, white youth were more likely to report tobacco use

continued on page two

Report from the Davidson County Child Death Review Team, 2002

Brook McKelvey, MA, MPH, Maternal Child Health Epidemiologist

The Child Death Review Team (CDRT) in Davidson County is a multi-disciplinary group that works to understand the causes of death of resident children under the age of 18 years. Founded in 1994 by a Mayoral Executive Order, the team is directed to affect system and policy change, thereby preventing future deaths. Members of the team represent a variety of disciplines including public health, law enforcement, medicine, and social service. This article provides a brief summary of the findings of this team for the year 2002.

There were a total of 122 fatalities recorded among resident children under the age of 18 in 2002 for Davidson County. The Child Death Review Team conducted a multi-disciplinary team review of all 122 deaths.

The CDRT judged 24.6% of the birth certificates and 40.2% of the death

continued on page three

In This Issue:

What's the Difference? Exploring the Racial Differences between Nashville Youth and Their Involvement in Risk Behaviors (Last in a Series) **1**

Report from the Davidson County Child Death Review Team, 2002 **1**

Reported Cases of Selected Notifiable Diseases for January/February 2004 **6**

...continued from page one

Table 1. Overall Results of Disparities Among Youth (from the 2003 Nashville YRBS)

Behavior	Total	Female	Male	Black	White
Currently sexually active (past 3 months)	36%	35%	37%	43%	31%
Ever been pregnant or gotten someone pregnant	8%	9%	7%	12%	4%
Ever had sexual intercourse	50%	46%	43%	62%	41%
Rarely or Never Use Seatbelt	16%	11%	20%	19%	11%
Has been in a physical fight (past 12 months)	31%	24%	37%	33%	29%
Seriously considered suicide	17%	23%	10%	16%	18%
Current Smoker (daily for the past 30 days)	14%	15%	14%	8%	20%
Smoked a whole cigarette before age 13	16%	14%	18%	13%	19%
Watched 2 or more hours of TV per day	69%	67%	72%	82%	59%

than black youth. While differences between racial categories are apparent across categories, there are some substantive differences along gender lines as well. More specifically, female respondents were more likely than male respondents to report that they had seriously considered suicide (23% vs. 10%).

Race/Sex Group Disparities

While the overall results show alarming disparities, the results become even more disparaging when examined by race/sex group. Table 2 shows selected variables by race/sex group. (See Table 2.) (Please Note: The percentages reported in this table represent only the adolescents who reported engaging in the particular behavior.) The results reveal that some of our youth are engaging in dangerous behaviors at a disproportionately higher rate than others. For example, black females were more likely than any other race/sex group to report that they have ever been pregnant (45%). Additionally, white males were more likely to report being in a physical fight than the other race/sex groups (29%).

Discussion/Implications

The results of the 2003 Nashville YRBS not only reveal the reported behaviors of youth but also the apparent disparities. Some youth report engaging in detrimental behaviors in larger percentages than other groups, however, it is important to note that youth report engaging in these behaviors to some extent regardless of race and/or sex.

These disparate findings reveal a need to tailor our education efforts towards the particular groups we seek to assist. The 'one size fits all' model may not adequately address the issues that some groups encounter. While one group may be more at risk for sexually transmitted diseases, another group may experience health problems related to tobacco use. It appears that simply telling our youth not to engage in particular behaviors is an inadequate response to reducing these percentages. Youth should be educated on the dangers associated with their behaviors in a manner that reflects not only the issues that plague them as youth but also their respective race/sex groups.

continued on page three

Table 2. Disparities in Reported Behavior by Race and Sex Group (2003 Nashville YRBS)

Behavior	Black Female	White Female	Black Male	White Male
Currently sexually active (past 3 months)	25%	20%	24%	20%
Ever been pregnant or gotten someone pregnant	45%	14%	20%	8%
Ever had sexual intercourse	25%	18%	25%	20%
Rarely or Never Use Seatbelt	16%	13%	34%	19%
Has been in a physical fight (past 12 months)	21%	15%	23%	29%
Seriously considered suicide	29%	34%	9%	15%
Current Smoker (daily for the past 30 days)	12%	37%	10%	29%
Smoked a whole cigarette before age 13	15%	24%	16%	29%
Watched 2 or more hours of TV per day	29%	14%	27%	18%

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***View** the complete 2003 Nashville Youth Risk Behavior Survey at:* http://healthweb.nashville.gov/Web%20Docs/pdf%20copies/RiskBehavior.pdf

References

1. http://healthdisparities.nih.gov/whatare.html
2. Ellickson, Phyllis L., Maria Orlando, Joan S. Tucker, and David J. Klein. 2004. "From Adolescence to Young Adulthood: Racial/Ethnic Disparities in Smoking." *American Journal of Public Health:* 94:293-299.
3. Lowry, Richard, Howell Wechsler, Deborah A. Galuska, Janet E. Fulton, and Laura Kann. 2002. "Television Viewing and Its Associations with Overweight Sedentary Lifestyle, and Insuffiecint Consumption of Fruits and Vegetables among US High School Students: Differences by Race, Ethnicity, and Gender." *Journal of School Health:* 72: 413-421.

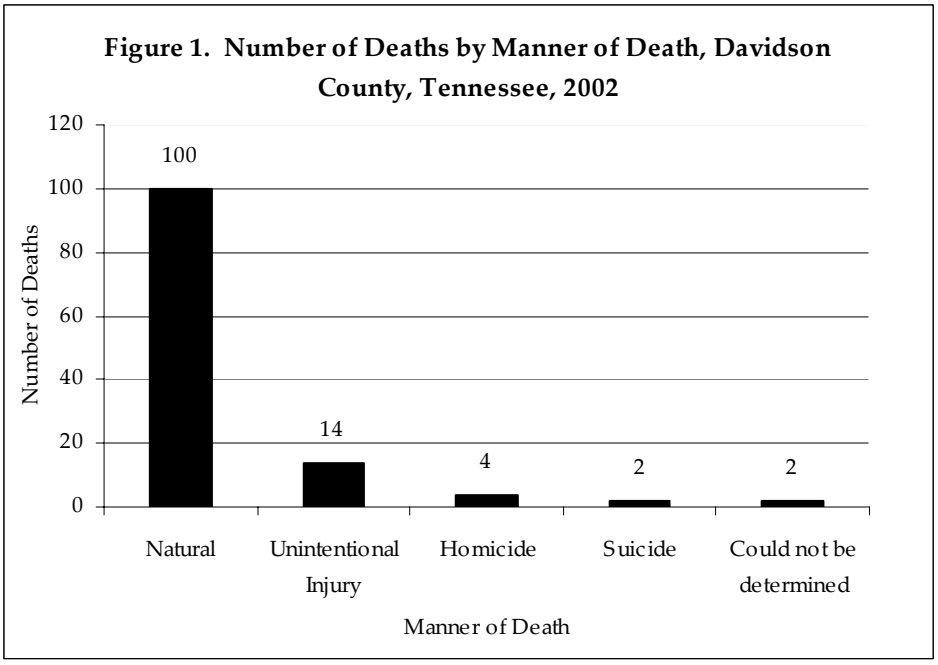
Report from the Davidson County Child Death Review Team, 2002

...continued from page one

certificates to be incomplete or inaccurate. Errors and incomplete information in vital statistics data has the potential of hindering the efforts of the CDRT. The types of errors found on birth certificates, for example, include inaccurate prenatal care information, incomplete recording of maternal medical risk factors, and incorrect recording of abnormalities of the child at birth. Death certificate errors tend to be primarily errors of omission. The fields most commonly left blank are manner of death and whether or not an autopsy was performed. Despite incomplete information, however, the CDRT agreed with the manner of death indicated on the death certificate in 85.3% of the cases. The manner of death was not indicated on the death certificate for 11.5% of the cases. In those instances, the manner of death was determined by the CDRT.

The CDRT determined the manner of death to be natural causes for 82.0% (100 deaths) of the cases and unintentional injuries for 11.5% (14 deaths). Homicide accounted for 3.3% (4 deaths) of the cases reviewed, and suicide accounted for 1.6% (2 deaths). The manner of death could not be determined for 1.6% (2 deaths) of the cases reviewed. (See Figure 1)

Figure 1. Number of Deaths by Manner of Death, Davidson County, Tennessee, 2002



The largest group of child deaths occurred among children less than one year old (68.9%). Of these, nearly 96.0% died of natural causes, and 38.1% survived less than 24 hours after birth. Those that survived less than 24 hours after birth represent 26.2% of all child deaths in 2002. The next largest group of child deaths occurred among children aged 13 – 17 (15.6%). Of these, 42.1% died from unintentional injuries. (See Table 1 on page 4.)

Demographically, 59.0% of child deaths in Davidson County during 2002 were male. More males than females died of natural causes (59 male deaths, 41 female deaths), homicide (4 male deaths, 0 female deaths), and suicide (2 male deaths, 0 female deaths). More females than males died of unintentional injuries (6 male deaths, 8 female deaths). (See Figure 2)

Over 46% of child deaths were reported as white, 48.4% were reported as black, and 4.9% were reported as other races. Nearly 7% of child deaths were recorded as Hispanic. (Data not shown).

continued on page four

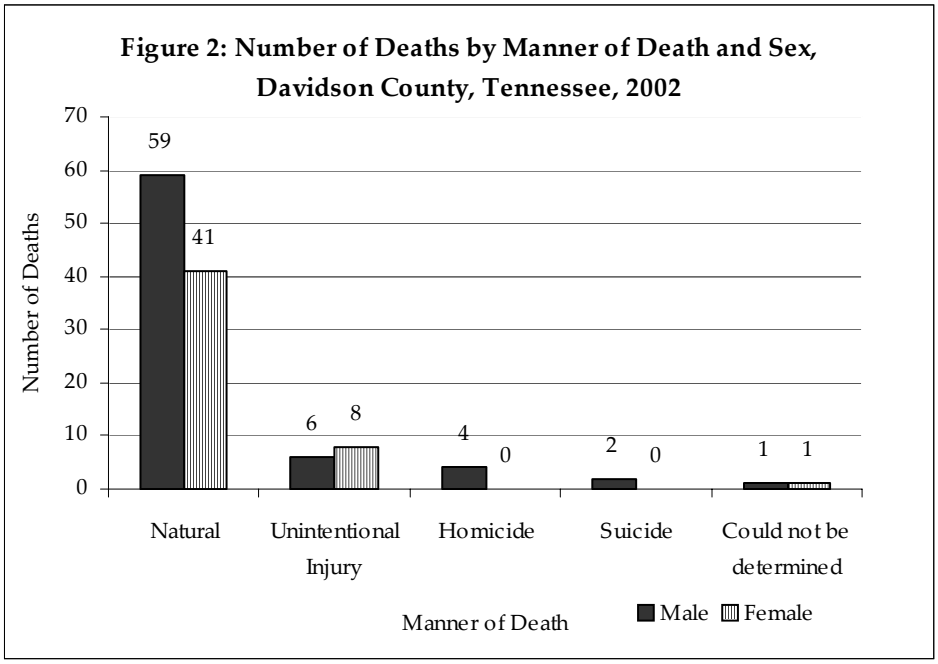
Table 1. Number and Percentage of Deaths by Manner of Death and Age, Race, and Sex, Davidson County, Tennessee, 2002

	Total		Age						Sex		Race			
			Detail of Cases < 1 year			All Cases								
Manner of Death	**N**	**%**	**<1 day**	**1-28 days**	**29-364 days**	**< 1 year**	**1-5 years**	**6-12 years**	**13-17 years**	**Male**	**Female**	**White**	**Black**	**Other**	**Unknown**
Natural	100	82.0	32	25	24	81	9	4	6	59	41	46	50	4	0
Unintentional Injury	14	11.5	0	0	1	1	4	1	8	6	8	9	3	2	0
Homicide	4	3.3	0	0	0	0	1	0	3	4	0	1	3	0	0
Suicide	2	1.6	0	0	0	0	0	0	2	2	0	1	1	0	0
Undetermined[1]	0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not Determined[2]	2	1.6	0	1	1	2	0	0	0	1	1	0	2	0	0
Total	122	100	32	26	26	84	14	5	19	72	50	57	59	6	0
Percentage*	100		26.2	21.3	21.3	68.9	11.5	4.1	15.6	59.0	41.0	46.7	48.4	4.9	0.0

*Percentage of total deaths

[1]Undetermined due to suspicious circumstances

[2]Could not be determined



The number of black deaths due to natural causes is 8.7% higher than the number of white deaths; however, the number of black deaths due to unintentional injury is 66.7% lower than the number of white deaths. (See Figure 3 on page 5.)

Table 2 depicts the number and percentage of child deaths by manner of death and maternal age at birth. In 2002, over half of all deaths occurred to children born to mothers between the ages of 20 and 29. Of these, 80.3% were due to natural causes. Nearly 25.0% of all deaths occurred in children born to mothers between the ages of 30 and 39. Of the deaths in this age category, nearly 93.0% were due to natural causes. The remaining deaths occurred to children born to mothers aged less than 20 years (27.9%) or 40 years old and older (1.8%).

The CDRT evaluates the presence of a history with child protective services, the presence of abuse and neglect, and the presence of a delay in seeking medical treatment with each child death. In some cases, there is enough evidence to raise suspicion but not enough evidence to provide a definitive answer. In those situations, the CDRT marks the case as unknown. In 2002, 13.9% (17 deaths) of cases had prior involvement with child protective services. The CDRT suspected child abuse and neglect in 1.6% (2 cases, 2 unknown) of the child death cases. Both cases of suspected abuse and neglect also had child protective services involvement. Of the 2 unknown abuse and neglect cases, 1 reported having child protective services involvement. Less than 1% (1 case) of cases demonstrated evidence of a delay in seeking medical treatment for the child (2 unknown).

Table 2. Number and Percentage of Deaths by Manner of Death and Maternal Age, Davidson County, Tennessee, 2002

	Total		Maternal Age					
Manner of Death	**N**	**%**	**13-14**	**15-17**	**18-19**	**20-29**	**30-39**	**40+**
Natural	95	85.6	0	6	13	49	25	2
Unintentional Injury	11	9.9	0	0	1	8	2	0
Homicide	1	0.9	0	0	1	0	0	0
Suicide	2	1.8	0	0	0	2	0	0
Undetermined[1]	0	0.0	0	0	0	0	0	0
Not Determined[2]	2	1.8	0	0	0	2	0	0
Total[3]	111	100	0	6	15	61	27	2
Percentage*	100		0.0	5.4	13.5	55.0	24.3	1.8

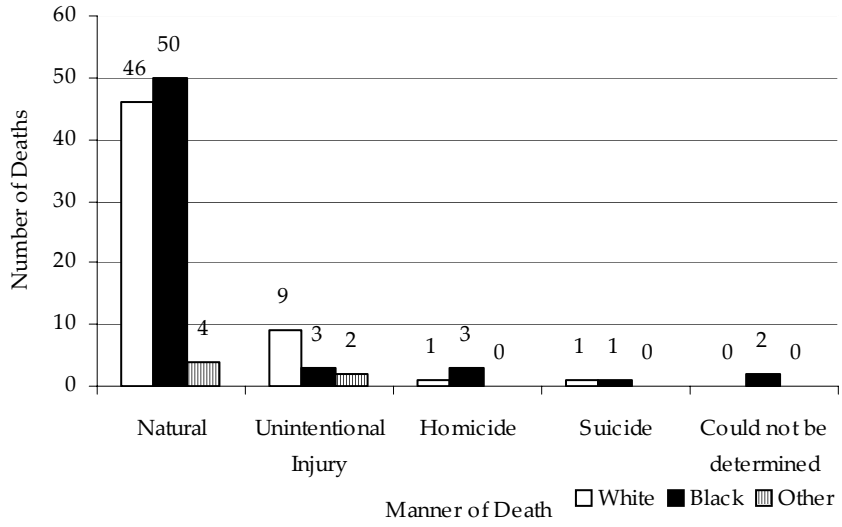
*Percentage of total deaths

[1]Undetermined due to suspicious circumstances

[2]Could not be determined

[3]Maternal age was not reported for 11 deaths. These deaths are excluded from this portion of the analysis.

Figure 3. Number of Deaths by Manner of Death and Race, Davidson County, Tennessee, 2002



Public Health Week 2004

"Reducing Health Disparities: Communities Moving from Statistics to Solutions" is the theme for National Public Health Week 2004: April 5 - 11. According to the American Public Health Association, statistics have shown that health disparities exist in all aspects of health care. Examples include ethnic, racial, geographic, disease specific, community infrastructure and resources, health literacy, age, and gender. Metro Public Health Department works daily in the Nashville community to identify disparities, to address the issues that arise from disparities, and to improve the quality of life for all residents.

Reported Cases of Selected Notifiable Diseases for January/February 2004

Disease	Cases Reported In January/February		Cumulative Cases Reported through February	
	2003	2004	2003	2004
AIDS	41	41	41	41
Campylobacteriosis	0	2	0	2
Chlamydia	343	316	343	316
DRSP (Invasive drug-resistant *Streptococcus pneumoniae*	4	5	4	5
Escherichia coli 0157:H7	0	0	0	0
Giardiasis	4	0	4	0
Gonorrhea	218	175	218	175
Hepatitis A	0	7	0	7
Hepatitis B (acute)	2	1	2	1
Hepatitis B (perinatal)	5	6	5	6
HIV	39	38	39	38
Influenza-like Illness	864	107	864	107
Neisseria meningitidis disease	0	0	0	0
Salmonellosis	5	2	5	2
Shigellosis	2	2	2	2
Syphilis (primary and secondary)	3	1	3	1
Tuberculosis	10	6	10	6
VRE (Vancomycin-resistant enterococci)	6	4	6	4

To report a notifiable disease, please contact:

Sexually transmitted diseases: Brad Beasley at 340-5676
AIDS/HIV: Mary Angel-Beckner at 340-5330
Hepatitis B: Denise Stratz at 340-2174
Tuberculosis: Alisa Haushalter at 340-5650
Hepatitis C: Pat Sanders at 340-5632
Vaccine-preventable diseases: Mary Fowler at 340-2168
All other notifiable diseases: Pam Trotter at 340-5632

Return Service Requested

Public Health Watch welcomes feedback, articles, letters, and suggestions. To communicate with *Public Health Watch* staff, please:

Telephone: (615) 340 - 5683
Fax: (615) 340 - 2292
E-mail: nancy.horner@nashville.gov